



AB PRIME

Two-row general purpose barley

- High-yielding line with excellent drought tolerance (>CDC Austenson)
- Good lodging resistance (equal to CDC Austenson)
- Excellent disease resistance package with resistance to all Priority 1 diseases

Strengths of AB Prime

- Grain yield: AB Prime had good yields in the drought year of 2018, being 8% higher than CDC Austenson and 5% higher than Champion. AB Prime maintained good yields in 2019 across all soil zones, with 2% higher yields than CDC Austenson and Champion. Overall grain yields in the Two-Row Coop were 4% higher than CDC Austenson and 3% higher than Champion. AB Prime did particularly well in the western Black/Grey Soil Zone.
- Lodging resistance is similar to the better of the checks, CDC Austenson.
- Quality: high percent plump and low percent thins under drought and non-drought conditions.
- Disease resistance: AB Prime has resistance to stem rust and the surface-borne smuts, and moderate resistance to the net-form of net blotch. Intermediate resistance to spot-form of net blotch, scald, spot blotch, and Fusarium head blight.

AB Prime was developed by Western Crop Innovations and is available through [SeedNet](#).

Table 1. Yield of AB Prime averaged over the 2018 and 2019 Western Cooperative Two-Row Barley Registration Trials.

Entry	2018		2019		2 Year Average	
	kg/ha	CDC Copeland %	kg/ha	CDC Copeland %	kg/ha	CDC Copeland %
CDC Copeland	5818	100	6607	100	6213	100
AC Metcalfe	5601	96	6209	94	5905	95
AAC Synergy	6282	108	6979	106	6630	107
CDC Austenson	6177	106	7205	109	6691	108
Champion	6326	109	7195	109	6760	109
AB Prime	6636	114	7308	111	6972	112
Station Years	15		15		30	

Table 2. Agronomic traits of AB Prime averaged over the 2018 and 2019 Western Cooperative Two-Row Barley Registration Trials.

Entry	Heading days	Maturity days	Height cm	Lodging 1-9	Test Wt kg/hL	Kernel Wt mg	Plump >6/64 %	Thins <5/64 %
CDC Copeland	59.1	94.4	82.5	1.8	64.9	48.3	94.9	0.8
AC Metcalfe	55.5	93.6	77.1	3.3	66.2	46.7	95.2	1.2
AAC Synergy	56.8	94.5	77.2	2.5	65.7	49.7	96.6	1.2
CDC Austenson	58.4	95.7	78.1	1.8	67.5	49.6	95.3	1.2
Champion	55.2	94.3	76.3	3.3	67.3	52.0	95.7	1.2
AB Prime	55.3	95.3	81.6	1.9	65.7	47.9	96.1	0.8
Station Years	30	32	31	4	32	28	29	6

Table 3. Overall disease ratings of AB Prime from the 2019 Western Cooperative Two-row Barley Registration Trials.

Entry	Net Blotch		Scald	Spot Blotch	Smut		Stem Rust	FHB
	Net Form	Spot Form			Loose	Surface		
CDC Copeland	I-MR	I	S	MS	MR-R	R	R	I
AC Metcalfe	MS	I	S	I	R	MR-R	R	I
AAC Synergy	MR	I	S	I-MR	MS	MR	R	S-I
CDC Austenson	MR	I	S	I-MR	MS	R	MR	S-I
Champion	MS-I	I	S	I	MR-R	I	I-MR	S
AB Prime	MR	I	I	I	S	R	R	I

R — resistant, MR – Moderately resistant, I – intermediate resistance, MS – moderately susceptible, S—susceptible.